

IN THE CLAIMS:

Kindly replace the claims of record with the following full set of claims

1. (Currently amended) An Interference canceller comprising:
an adaptive filter for modeling an interference, and
a spectral processor for processing the modeled interference together with
near end speech and the actual interference, ~~and characterized in that the interference~~
~~canceller further comprises~~ an interference model mismatch compensator coupled to the
adaptive filter for providing a mismatch signal for the spectral processor, said mismatch
signal being modeled based on a decay function independent of a speech input. showing a
~~speech independent decay.~~
2. (Currently amended) The Interference canceller according to claim [[2,]] 1
~~wherein characterized in that~~ the interference canceller comprises a step size estimator
coupled to the interference model mismatch compensator.
3. (Currently amended) The Interference canceller according to claim 1, wherein
~~characterized in that~~ the interference model mismatch compensator is arranged for
calculating an interference model mismatch estimate based on a minimum of the ratio of
a spectral measure of the near end speech and actual interference, and the modeled
interference of the adaptive filter.
4. (Currently amended) The Interference canceller according to claim 3, wherein
~~characterized in that~~ the minimum of said ratio is determined over a time span.
5. (Currently amended) The Interference canceller according to claim 4, wherein
~~characterized in that~~ the time span contains at least one pause in the speech.
6. (Currently amended) The Interference canceller according to claim 4, wherein
~~characterized in that~~ the time span lasts at least 4 to 5 seconds.

7. (Currently amended) The Interference canceller according to claim 3, wherein
~~characterized in that~~ the spectral measure is defined by ~~[[some]]~~ at least one positive
function of the spectral power concerned, ~~[[such as]]~~ selected from the group consisting
of: the spectral magnitude, the squared spectral magnitude, the power spectral density or
the Mel-scale spectral density.

8. (Currently amended) The Interference canceller according to claim 1, wherein
characterized in that the interference canceller is embodied as an echo canceller [[and/]or
a noise canceller.

9. (Currently amended) A System, in particular a communication system, for example a hands-free communication device, such as a mobile telephone, a speech recognition system or a voice-controlled system, which system is provided with an interference canceller according to claim 1, the interference canceller comprising:

- an adaptive filter for modeling an actual interference, and
- a spectral processor for processing the modeled interference together with near end speech and the actual interference, and characterized in that the interference canceller further comprises an interference model mismatch compensator coupled to the adaptive filter for providing a mismatch signal for the spectral processor, said mismatch signal being modeled based on a decay function independent of a speech input. showing a speech independent decay..

10. (Currently amended) A method Method for cancelling an interference, whereby an actual interference is modeled and the modeled interference, together with near end speech and the actual interference are processed, wherein ~~characterized in that~~ an interference model mismatch signal is used for modeling the actual interference, which mismatch signal being modeled based on a decay function independent of a speech input. showing a speech independent decay..

11. (Cancelled).

12. (New) The communication system of claim 9, wherein said communication system is selected from the group consisting of: a mobile telephone, a speech recognition system and a voice controlled system.